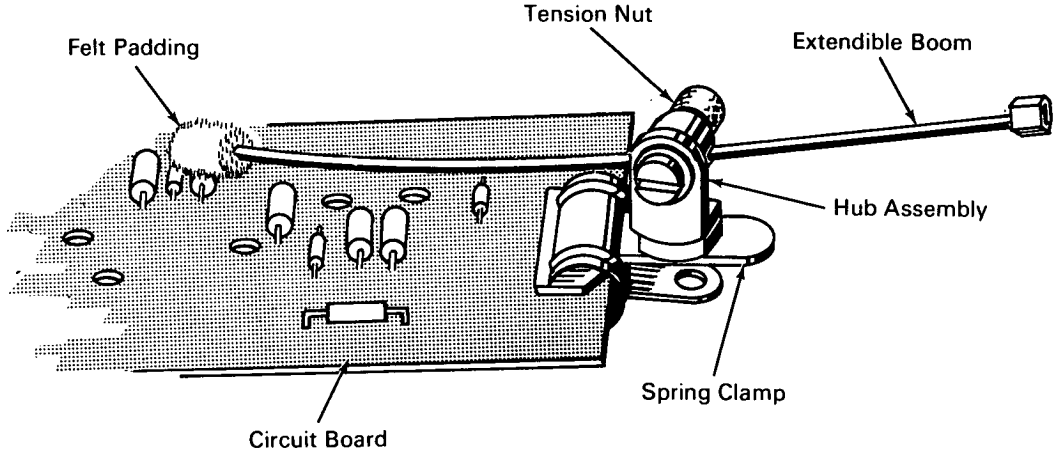
NASA TECH BRIEF

Fixture Aids Soldering of Electronic Components on Circuit Board



The problem:

To design a fixture that will hold small electronic components in the desired position while they are being soldered on a circuit board. Common methods of holding components in position include the use of friction tape, bending of component leads, and application of finger pressure, all of which are often unsatisfactory.

The solution:

A fixture incorporating a spring clamp that is clipped on the edge of a circuit board and an adjustable spring-steel boom that holds components against the board.

How it's done:

The spring clamp, with felt attached to the clamping jaws to prevent damage to the circuit board, provides a base for the fixture. The spring-steel boom, padded at the end which will exert pressure on the component to be soldered, slips through a slot in a hub assembly mounted on an angle bracket. Friction mounting of the bracket and hub assembly permits the boom to be rotated about two mutually perpendicular axes (one axis in a horizontal plane and the other in a vertical plane) to apply holding pressure to any component within the radius of the boom. The working radius of the boom can be adjusted by slipping the boom through the slot in the hub assembly.

Notes:

1. The felt pad on the end of the boom can be replaced with different attachments for other holding tasks.
2. Inquiries concerning this invention may be directed to:

   Technology Utilization Officer
   Ames Research Center
   Moffett Field, California, 94035
   Reference: B66-10162

(continued overleaf)

Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C., 20546.

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(ARC-56)